



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Spectra Energy Transmission, LLC

Certificate of Analysis Number:

09081447

<u>Report To:</u> Spectra Energy Transmission, LLC Joe Bauer 5400 Westheimer Court Houston TX 77056- ph: (713) 627-5400 fax:	<u>Project Name:</u> Spectra Energy <u>Site:</u> Steckman Ridge <u>Site Address:</u> <u>PO Number:</u> Agreement No. ENV-0506 <u>State:</u> Pennsylvania <u>State Cert. No.:</u> 68-03598 <u>Date Reported:</u> 8/31/2009
---	--

This Report Contains A Total Of 23 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

9/1/2009

Date



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Case Narrative for:
Spectra Energy Transmission, LLC

Certificate of Analysis Number:

09081447

Report To: Spectra Energy Transmission, LLC Joe Bauer 5400 Westheimer Court Houston TX 77056- ph: (713) 627-5400 fax:	Project Name: Spectra Energy Site: Steckman Ridge Site Address: PO Number: Agreement No. ENV-0506 State: Pennsylvania State Cert. No.: 68-03598 Date Reported: 8/31/2009
---	---

I. SAMPLE RECEIPT:

All samples were received intact. The internal ice chest temperatures were measured on receipt and are recorded on the attached Sample Receipt Checklist.

Samples for COC ARF 9834 were received at a temperature of 15.2 and 15.9 degrees Celsius.

Collection date and times were missing from the Chain of Custody; however, were noted on the sample containers.

Please note, containers received for COC ARF 9834 were labeled as "Kuhne-Well-082809". Per client request via e-mail on August 31, 2009, samples were logged in as per sample IDs noted on the Chain of Custody "MISC Drinking Water - 2321".

Containers for the Metals analyses by Method E200.8 were received unpreserved and were preserved upon receipt with 3 milliliters of Nitric acid Lot # 072709-2EE.

Containers for the COD analyses by Method SM5220 C were received unpreserved and were preserved upon receipt with 2 milliliters of Sulfuric acid Lot # 052509-2U.

Client was notified of the nonconformances mentioned above via Sample Receipt Confirmation e-mail on August 31, 2009. Per client request via e-mail on August 31, 2009 SPL, Inc. continued with analyses requested.

Please see attached sample receipt checklist for any further nonconformance issues.

II: ANALYSES AND EXCEPTIONS:

N-Hexane Extractable Material (1664A):

Due to limited sample volume a Matrix Spike Duplicate (MSD) was not extracted with Batch ID R282534. A Matrix Spike (MS) as well as a Laboratory Control Sample / Laboratory Control Sample Duplicate (LCS/LCSD) were extracted with the analytical batch and serve as the batch quality control (QC). Spike recoveries for the MS, LCS and LCSD were within QC limits.

PCB (E608):

Due to limited sample volume, a Matrix Spike (MS) or Matrix Spike Duplicate (MSD) was not extracted with Batch ID: (93407) for the PCBs analysis by EPA Method E608. A Laboratory Control Sample (LCS) and a Laboratory Control Sample Duplicate (LCSD) were extracted with the analytical batch and serve as the batch quality control (QC). The LCS and LCSD recovered acceptably and precision criteria were met.

Volatile Organics (SW8260):

Client sample ID "MISC Drinking Water - 2321" (SPL ID: 09081447-01) was randomly selected for use in SPL's quality control program (Batch ID: R282519). The Matrix Spike and/or Matrix Spike Duplicate (MS/MSD) recoveries were outside of the advisory limits for the target analytes toluene, 1,2,3-trichlorobenzene and o-xylene. A Laboratory Control Sample (LCS) was analyzed as a quality control check for the analytical batch and all recoveries were within acceptable limits.

09081447 Page 1

9/1/2009

Sylvia Grice
Senior Project Manager

Test results meet all requirements of NELAC, unless specified in the narrative.

Date



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Case Narrative for:
Spectra Energy Transmission, LLC

Certificate of Analysis Number:

09081447

SIM PAH (SW8270C):

Due to limited sample volume, a Matrix Spike (MS) or Matrix Spike Duplicate (MSD) was not extracted with Batch ID: 93398 for the Semivolatile Organics analysis by SW846 Method 8270C. A Laboratory Control Sample (LCS) and a Laboratory Control Sample Duplicate (LCSD) were extracted with the analytical batch and serve as the batch quality control (QC). The LCS and LCSD recovered acceptably and precision criteria were met.

III. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report (" mg/kg-dry " or " ug/kg-dry ").

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or by his designee, as verified by the following signature.

Sylvia Grice
Senior Project Manager

Test results meet all requirements of NELAC, unless specified in the narrative.

09081447 Page 2
9/1/2009

Date



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Spectra Energy Transmission, LLC

Certificate of Analysis Number:

09081447

Report To: Spectra Energy Transmission, LLC
Joe Bauer
5400 Westheimer Court

Houston

TX

77056-

ph: (713) 627-5400 fax: (713) 989-8347

Fax To:

Project Name: Spectra Energy
Site: Steckman Ridge

Site Address:

PO Number: Agreement No. ENV-0506

State: Pennsylvania

State Cert. No.: 68-03598

Date Reported: 8/31/2009

Field Sampler: Mary Velasquez

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
MISC Drinking Water - 2321	09081447-01	Aqueous	8/28/2009 2:15:00 PM	8/31/2009 9:00:00 AM	9834	☐

Sylvia Grice
Senior Project Manager

9/1/2009

Date

Kesavalu M. Bagawandoss Ph.D., J.D.
Laboratory Director

Ted Yen
Quality Assurance Officer



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MISC Drinking Water - 2321 Collected: 08/28/2009 14:15 SPL Sample ID: 09081447-01

Site: Steckman Ridge

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
CHEMICAL OXYGEN DEMAND				MCL	SM5220 C	Units: mg/L	
Chemical Oxygen Demand	ND		3	1	08/31/09 14:00	BDG	5185027
N-HEXANE EXTRACTABLE MATERIAL				MCL	1664A	Units: mg/L	
n-Hexane Extractable Material	ND		5	1	08/31/09 16:15	KAM	5185090

Prep Method	Prep Date	Prep Initials	Prep Factor
	08/31/2009 14:00		1.00

PESTICIDE/PCBS				MCL	E608	Units: ug/L	
Aroclor 1016	ND		0.5	1	08/31/09 16:58	RLR	5185208
Aroclor 1221	ND		0.5	1	08/31/09 16:58	RLR	5185208
Aroclor 1232	ND		0.5	1	08/31/09 16:58	RLR	5185208
Aroclor 1242	ND		0.5	1	08/31/09 16:58	RLR	5185208
Aroclor 1248	ND		0.5	1	08/31/09 16:58	RLR	5185208
Aroclor 1254	ND		0.5	1	08/31/09 16:58	RLR	5185208
Aroclor 1260	ND		0.5	1	08/31/09 16:58	RLR	5185208
Total PCB	ND		0.5	1	08/31/09 16:58	RLR	5185208
Surr: Decachlorobiphenyl	86.0	%	14-159	1	08/31/09 16:58	RLR	5185208
Surr: Tetrachloro-m-xylene	85.6	%	48-120	1	08/31/09 16:58	RLR	5185208

Prep Method	Prep Date	Prep Initials	Prep Factor
E608	08/31/2009 13:39	N_M	1.00

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MISC Drinking Water - 2321

Collected: 08/28/2009 14:15

SPL Sample ID: 09081447-01

Site: Steckman Ridge

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SIM SEMIVOLATILES ORGANICS BY METHOD 8270C				MCL	SW8270C	Units: ug/L	
2-Methylnaphthalene	ND		0.05	1	08/31/09 16:51	S_G	5185163
Acenaphthene	ND		0.05	1	08/31/09 16:51	S_G	5185163
Acenaphthylene	ND		0.05	1	08/31/09 16:51	S_G	5185163
Anthracene	ND		0.05	1	08/31/09 16:51	S_G	5185163
Benz(a)anthracene	ND		0.05	1	08/31/09 16:51	S_G	5185163
Benzo(a)pyrene	ND		0.05	1	08/31/09 16:51	S_G	5185163
Benzo(b)fluoranthene	ND		0.05	1	08/31/09 16:51	S_G	5185163
Benzo(g,h,i)perylene	ND		0.05	1	08/31/09 16:51	S_G	5185163
Benzo(k)fluoranthene	ND		0.05	1	08/31/09 16:51	S_G	5185163
Chrysene	ND		0.05	1	08/31/09 16:51	S_G	5185163
Dibenz(a,h)anthracene	ND		0.05	1	08/31/09 16:51	S_G	5185163
Fluoranthene	ND		0.05	1	08/31/09 16:51	S_G	5185163
Fluorene	ND		0.05	1	08/31/09 16:51	S_G	5185163
Indeno(1,2,3-cd)pyrene	ND		0.05	1	08/31/09 16:51	S_G	5185163
Naphthalene	ND		0.05	1	08/31/09 16:51	S_G	5185163
Phenanthrene	ND		0.05	1	08/31/09 16:51	S_G	5185163
Pyrene	ND		0.05	1	08/31/09 16:51	S_G	5185163
Surr: 2-Fluorobiphenyl	41.2		% 10-123	1	08/31/09 16:51	S_G	5185163
Surr: Nitrobenzene-d5	30.6		% 10-165	1	08/31/09 16:51	S_G	5185163
Surr: Terphenyl-d14	43.4		% 10-150	1	08/31/09 16:51	S_G	5185163

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	08/31/2009 13:45	A_G	1.00

TOTAL METALS BY METHOD 200.8				MCL	E200.8	Units: mg/L	
Arsenic	0.0038		0.001	1	08/31/09 19:02	S_C	5185281
Cadmium	ND		0.0005	1	08/31/09 19:02	S_C	5185281
Chromium	ND		0.001	1	08/31/09 19:02	S_C	5185281
Copper	0.117		0.001	1	08/31/09 19:02	S_C	5185281
Lead	ND		0.001	1	08/31/09 19:02	S_C	5185281
Nickel	ND		0.001	1	08/31/09 19:02	S_C	5185281
Silver	ND		0.0005	1	08/31/09 19:02	S_C	5185281
Zinc	0.0064		0.001	1	08/31/09 19:02	S_C	5185281

Prep Method	Prep Date	Prep Initials	Prep Factor
E200.7/200.8	08/31/2009 14:00	R_V	1.00

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MISC Drinking Water - 2321

Collected: 08/28/2009 14:15

SPL Sample ID: 09081447-01

Site: Steckman Ridge

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY METHOD 8260B				MCL	SW8260B	Units: ug/L	
1,1,1,2-Tetrachloroethane	ND		1	1	08/31/09 13:53	E_G	5184799
1,1,1-Trichloroethane	ND		1	1	08/31/09 13:53	E_G	5184799
1,1,2,2-Tetrachloroethane	ND		1	1	08/31/09 13:53	E_G	5184799
1,1,2-Trichloroethane	ND		1	1	08/31/09 13:53	E_G	5184799
1,1-Dichloroethane	ND		1	1	08/31/09 13:53	E_G	5184799
1,1-Dichloroethene	ND		1	1	08/31/09 13:53	E_G	5184799
1,1-Dichloropropene	ND		1	1	08/31/09 13:53	E_G	5184799
1,2,3-Trichlorobenzene	ND		1	1	08/31/09 13:53	E_G	5184799
1,2,3-Trichloropropane	ND		1	1	08/31/09 13:53	E_G	5184799
1,2,4-Trichlorobenzene	ND		1	1	08/31/09 13:53	E_G	5184799
1,2,4-Trimethylbenzene	ND		1	1	08/31/09 13:53	E_G	5184799
1,2-Dibromo-3-chloropropane	ND		5	1	08/31/09 13:53	E_G	5184799
1,2-Dibromoethane	ND		1	1	08/31/09 13:53	E_G	5184799
1,2-Dichlorobenzene	ND		1	1	08/31/09 13:53	E_G	5184799
1,2-Dichloroethane	ND		1	1	08/31/09 13:53	E_G	5184799
1,2-Dichloropropane	ND		1	1	08/31/09 13:53	E_G	5184799
1,3,5-Trimethylbenzene	ND		1	1	08/31/09 13:53	E_G	5184799
1,3-Dichlorobenzene	ND		1	1	08/31/09 13:53	E_G	5184799
1,3-Dichloropropane	ND		1	1	08/31/09 13:53	E_G	5184799
1,4-Dichlorobenzene	ND		1	1	08/31/09 13:53	E_G	5184799
2,2-Dichloropropane	ND		1	1	08/31/09 13:53	E_G	5184799
2-Chlorotoluene	ND		1	1	08/31/09 13:53	E_G	5184799
4-Chlorotoluene	ND		1	1	08/31/09 13:53	E_G	5184799
4-Isopropyltoluene	ND		1	1	08/31/09 13:53	E_G	5184799
Benzene	ND		1	1	08/31/09 13:53	E_G	5184799
Bromobenzene	ND		1	1	08/31/09 13:53	E_G	5184799
Bromochloromethane	ND		1	1	08/31/09 13:53	E_G	5184799
Bromodichloromethane	ND		1	1	08/31/09 13:53	E_G	5184799
Bromoform	ND		1	1	08/31/09 13:53	E_G	5184799
Bromomethane	ND		1	1	08/31/09 13:53	E_G	5184799
Carbon tetrachloride	ND		1	1	08/31/09 13:53	E_G	5184799
Chlorobenzene	ND		1	1	08/31/09 13:53	E_G	5184799
Chloroethane	ND		1	1	08/31/09 13:53	E_G	5184799
Chloroform	ND		1	1	08/31/09 13:53	E_G	5184799
Chloromethane	ND		1	1	08/31/09 13:53	E_G	5184799
Dibromochloromethane	ND		1	1	08/31/09 13:53	E_G	5184799
Dibromomethane	ND		1	1	08/31/09 13:53	E_G	5184799
Dichlorodifluoromethane	ND		1	1	08/31/09 13:53	E_G	5184799
Ethylbenzene	ND		1	1	08/31/09 13:53	E_G	5184799

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MISC Drinking Water - 2321

Collected: 08/28/2009 14:15

SPL Sample ID: 09081447-01

Site: Steckman Ridge

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Hexachlorobutadiene	ND		1	1	08/31/09 13:53	E_G	5184799
Isopropylbenzene	ND		1	1	08/31/09 13:53	E_G	5184799
Methyl tert-butyl ether	ND		1	1	08/31/09 13:53	E_G	5184799
Methylene chloride	ND		1	1	08/31/09 13:53	E_G	5184799
Naphthalene	ND		1	1	08/31/09 13:53	E_G	5184799
n-Butylbenzene	ND		1	1	08/31/09 13:53	E_G	5184799
n-Propylbenzene	ND		1	1	08/31/09 13:53	E_G	5184799
sec-Butylbenzene	ND		1	1	08/31/09 13:53	E_G	5184799
Styrene	ND		1	1	08/31/09 13:53	E_G	5184799
tert-Butylbenzene	ND		1	1	08/31/09 13:53	E_G	5184799
Tetrachloroethene	ND		1	1	08/31/09 13:53	E_G	5184799
Toluene	ND		1	1	08/31/09 13:53	E_G	5184799
Trichloroethene	ND		1	1	08/31/09 13:53	E_G	5184799
Trichlorofluoromethane	ND		1	1	08/31/09 13:53	E_G	5184799
Vinyl chloride	ND		1	1	08/31/09 13:53	E_G	5184799
cis-1,2-Dichloroethene	ND		1	1	08/31/09 13:53	E_G	5184799
cis-1,3-Dichloropropene	ND		1	1	08/31/09 13:53	E_G	5184799
m,p-Xylene	ND		2	1	08/31/09 13:53	E_G	5184799
o-Xylene	ND		1	1	08/31/09 13:53	E_G	5184799
trans-1,2-Dichloroethene	ND		1	1	08/31/09 13:53	E_G	5184799
trans-1,3-Dichloropropene	ND		1	1	08/31/09 13:53	E_G	5184799
Xylenes, Total	ND		1	1	08/31/09 13:53	E_G	5184799
Surr: 1,2-Dichloroethane-d4	111		% 78-116	1	08/31/09 13:53	E_G	5184799
Surr: 4-Bromofluorobenzene	113		% 74-125	1	08/31/09 13:53	E_G	5184799
Surr: Toluene-d8	100		% 82-118	1	08/31/09 13:53	E_G	5184799

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)

D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

Quality Control Documentation



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Spectra Energy Transmission, LLC

Spectra Energy

Analysis: N-Hexane Extractable Material
Method: 1664A

WorkOrder: 09081447
Lab Batch ID: R282534

Method Blank

RunID: EX_090831D-5185086 Units: mg/L
Analysis Date: 08/31/2009 16:15 Analyst: KAM
Preparation Date: 08/31/2009 14:00 Prep By: Method:

Samples in Analytical Batch:

Lab Sample ID Client Sample ID
09081447-01F MISC Drinking Water - 2321

Analyte	Result	Rep Limit
n-Hexane Extractable Material	ND	5.0

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: EX_090831D-5185087 Units: mg/L
Analysis Date: 08/31/2009 16:15 Analyst: KAM
Preparation Date: 08/31/2009 14:00 Prep By: Method:

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
n-Hexane Extractable Material	40.0	40.0	100	40.0	39.8	99.5	0.5	18	78	114

Matrix Spike (MS)

Sample Spiked: 09081447-01
RunID: EX_090831D-5185092 Units: mg/L
Analysis Date: 08/31/2009 16:15 Analyst: KAM
Preparation Date: 08/31/2009 14:00 Prep By: Method:

Analyte	Sample Result	Spike Added	MS Result	MS % Recovery	Low Limit	High Limit
n-Hexane Extractable Material	ND	40	40.0	100	78	114

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Spectra Energy Transmission, LLC

Spectra Energy

Analysis: Pesticide/PCBs
Method: E608

WorkOrder: 09081447
Lab Batch ID: 93407

Method Blank

Samples in Analytical Batch:

RunID: HP_A_090831C-5185210 Units: ug/L
Analysis Date: 08/31/2009 17:33 Analyst: RLR
Preparation Date: 08/31/2009 13:39 Prep By: N_M Method: E608

Lab Sample ID 09081447-01C
Client Sample ID MISC Drinking Water - 2321

Analyte	Result	Rep Limit
Aroclor 1016	ND	0.50
Aroclor 1221	ND	0.50
Aroclor 1232	ND	0.50
Aroclor 1242	ND	0.50
Aroclor 1248	ND	0.50
Aroclor 1254	ND	0.50
Aroclor 1260	ND	0.50
Total PCB	ND	0.50
Surr: Decachlorobiphenyl	97.1	14-159
Surr: Tetrachloro-m-xylene	89.1	48-120

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: HP_A_090831C-5185206 Units: ug/L
Analysis Date: 08/31/2009 16:23 Analyst: RLR
Preparation Date: 08/31/2009 13:39 Prep By: N_M Method: E608

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Aroclor 1016	10.0	9.43	94.3	10.0	9.66	96.6	2.4	30	50	114
Aroclor 1260	10.0	9.85	98.5	10.0	9.66	96.6	1.9	30	8	127
Surr: Decachlorobiphenyl	1.00	0.987	98.7	1.00	1.00	100	1.8	30	14	159
Surr: Tetrachloro-m-xylene	1.00	0.931	93.1	1.00	0.946	94.6	1.7	30	48	120

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09081447 Page 10

9/1/2009 9:28:43 AM



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Spectra Energy Transmission, LLC

Spectra Energy

Analysis: Total Metals by Method 200.8
Method: E200.8

WorkOrder: 09081447
Lab Batch ID: 93430-I

Method Blank

Samples in Analytical Batch:

RunID: ICPMS_090831B-5185279 Units: mg/L

Lab Sample ID

Client Sample ID

Analysis Date: 08/31/2009 18:52

Analyst: S_C

09081447-01B

MISC Drinking Water - 2321

Preparation Date: 08/31/2009 14:00

Prep By: R_V Method: E200.7/200.8

Analyte	Result	Rep Limit
Arsenic	ND	0.001
Cadmium	ND	0.0005
Chromium	ND	0.001
Copper	ND	0.001
Lead	ND	0.001
Nickel	ND	0.001
Silver	ND	0.0005
Zinc	ND	0.001

Laboratory Control Sample (LCS)

RunID: ICPMS_090831B-5185280 Units: mg/L

Analysis Date: 08/31/2009 18:57 Analyst: S_C

Preparation Date: 08/31/2009 14:00 Prep By: R_V Method: E200.7/200.8

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Arsenic	0.1000	0.09622	96.22	85	115
Cadmium	0.1000	0.09748	97.48	85	115
Chromium	0.1000	0.09454	94.54	85	115
Copper	0.1000	0.09791	97.91	85	115
Lead	0.1000	0.08778	87.78	85	115
Nickel	0.1000	0.1008	100.8	85	115
Silver	0.1000	0.08901	89.01	85	115
Zinc	0.1000	0.09803	98.03	85	115

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 09081447-01

RunID: ICPMS_090831B-5185282 Units: mg/L

Analysis Date: 08/31/2009 19:07 Analyst: S_C

Preparation Date: 08/31/2009 14:00 Prep By: R_V Method: E200.7/200.8

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Spectra Energy Transmission, LLC

Spectra Energy

Analysis: Total Metals by Method 200.8
Method: E200.8

WorkOrder: 09081447
Lab Batch ID: 93430-I

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Arsenic	0.003802	0.1	0.08980	86.00	0.1	0.08812	84.32	1.888	20	70	130
Cadmium	ND	0.1	0.09905	99.05	0.1	0.09687	96.87	2.225	20	70	130
Chromium	ND	0.1	0.1013	101.3	0.1	0.09842	98.42	2.884	20	70	130
Copper	0.1171	0.1	0.2120	94.90	0.1	0.2090	91.90	1.425	20	70	130
Lead	ND	0.1	0.09572	95.72	0.1	0.09313	93.13	2.743	20	70	130
Nickel	ND	0.1	0.1018	101.0	0.1	0.1006	99.80	1.186	20	70	130
Silver	ND	0.1	0.09316	93.16	0.1	0.09238	92.38	0.8408	20	70	130
Zinc	0.006396	0.1	0.08926	82.86	0.1	0.08813	81.73	1.274	20	70	130

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09081447 Page 12

9/1/2009 9:28:43 AM



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Spectra Energy Transmission, LLC

Spectra Energy

Analysis: SIM Semivolatiles Organics by Method 8270C
Method: SW8270C

WorkOrder: 09081447
Lab Batch ID: 93398

Method Blank

RunID: J_090831C-5185368 Units: ug/L
Analysis Date: 08/31/2009 18:27 Analyst: S_G
Preparation Date: 08/31/2009 10:17 Prep By: A_G Method: SW3510C

Samples in Analytical Batch:

Lab Sample ID 09081447-01D
Client Sample ID MISC Drinking Water - 2321

Analyte	Result	Rep Limit
2-Methylnaphthalene	ND	0.050
Acenaphthene	ND	0.050
Acenaphthylene	ND	0.050
Anthracene	ND	0.050
Benz(a)anthracene	ND	0.050
Benzo(a)pyrene	ND	0.050
Benzo(b)fluoranthene	ND	0.050
Benzo(g,h,i)perylene	ND	0.050
Benzo(k)fluoranthene	ND	0.050
Chrysene	ND	0.050
Dibenz(a,h)anthracene	ND	0.050
Fluoranthene	ND	0.050
Fluorene	ND	0.050
Indeno(1,2,3-cd)pyrene	ND	0.050
Naphthalene	ND	0.050
Phenanthrene	ND	0.050
Pyrene	ND	0.050
Surr: 2-Fluorobiphenyl	39.6	10-123
Surr: Nitrobenzene-d5	31.8	10-165
Surr: Terphenyl-d14	38.6	10-150

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: J_090831C-5185366 Units: ug/L
Analysis Date: 08/31/2009 17:22 Analyst: S_G
Preparation Date: 08/31/2009 10:17 Prep By: A_G Method: SW3510C

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
2-Methylnaphthalene	0.500	0.249	49.8	0.500	0.248	49.6	0.4	30	21	125
Acenaphthene	0.500	0.251	50.2	0.500	0.245	49.0	2.4	30	21	138
Acenaphthylene	0.500	0.233	46.6	0.500	0.228	45.6	2.2	30	20	131
Anthracene	0.500	0.210	42.0	0.500	0.201	40.2	4.4	30	20	130
Benz(a)anthracene	0.500	0.220	44.0	0.500	0.198	39.6	10.5	30	27	133
Benzo(a)pyrene	0.500	0.252	50.4	0.500	0.245	49.0	2.8	30	27	122
Benzo(b)fluoranthene	0.500	0.266	53.2	0.500	0.260	52.0	2.3	30	23	126
Benzo(g,h,i)perylene	0.500	0.270	54.0	0.500	0.263	52.6	2.6	30	29	125
Benzo(k)fluoranthene	0.500	0.245	49.0	0.500	0.246	49.2	0.4	30	31	133

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09081447 Page 13

9/1/2009 9:28:43 AM



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Spectra Energy Transmission, LLC

Spectra Energy

Analysis: SIM Semivolatiles Organics by Method 8270C
Method: SW8270C

WorkOrder: 09081447
Lab Batch ID: 93398

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: J_090831C-5185366 Units: ug/L
Analysis Date: 08/31/2009 17:22 Analyst: S_G
Preparation Date: 08/31/2009 10:17 Prep By: A_G Method: SW3510C

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Chrysene	0.500	0.237	47.4	0.500	0.244	48.8	2.9	30	36	135
Dibenz(a,h)anthracene	0.500	0.254	50.8	0.500	0.264	52.8	3.9	30	24	120
Fluoranthene	0.500	0.229	45.8	0.500	0.215	43.0	6.3	30	26	125
Fluorene	0.500	0.252	50.4	0.500	0.254	50.8	0.8	30	22	132
Indeno(1,2,3-cd)pyrene	0.500	0.274	54.8	0.500	0.279	55.8	1.8	30	23	127
Naphthalene	0.500	0.248	49.6	0.500	0.250	50.0	0.8	30	23	136
Phenanthrene	0.500	0.236	47.2	0.500	0.232	46.4	1.7	30	22	133
Pyrene	0.500	0.214	42.8	0.500	0.217	43.4	1.4	30	31	142
Surr: 2-Fluorobiphenyl	0.500	0.128	25.6	0.500	0.126	25.2	1.6	30	10	123
Surr: Nitrobenzene-d5	0.500	0.127	25.4	0.500	0.127	25.4	0.0	30	10	165
Surr: Terphenyl-d14	0.500	0.133	26.6	0.500	0.129	25.8	3.1	30	10	150

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09081447 Page 14

9/1/2009 9:28:43 AM



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Spectra Energy Transmission, LLC

Spectra Energy

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09081447
Lab Batch ID: R282519

Method Blank

Samples in Analytical Batch:

RunID: L_090831A-5184798 Units: ug/L
Analysis Date: 08/31/2009 11:07 Analyst: E_G

Lab Sample ID 09081447-01A
Client Sample ID MISC Drinking Water - 2321

Analyte	Result	Rep Limit
1,1,1,2-Tetrachloroethane	ND	1.0
1,1,1-Trichloroethane	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
1,1,2-Trichloroethane	ND	1.0
1,1-Dichloroethane	ND	1.0
1,1-Dichloroethene	ND	1.0
1,1-Dichloropropene	ND	1.0
1,2,3-Trichlorobenzene	ND	1.0
1,2,3-Trichloropropane	ND	1.0
1,2,4-Trichlorobenzene	ND	1.0
1,2,4-Trimethylbenzene	ND	1.0
1,2-Dibromo-3-chloropropane	ND	5.0
1,2-Dibromoethane	ND	1.0
1,2-Dichlorobenzene	ND	1.0
1,2-Dichloroethane	ND	1.0
1,2-Dichloropropane	ND	1.0
1,3,5-Trimethylbenzene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,3-Dichloropropane	ND	1.0
1,4-Dichlorobenzene	ND	1.0
2,2-Dichloropropane	ND	1.0
2-Chlorotoluene	ND	1.0
4-Chlorotoluene	ND	1.0
4-Isopropyltoluene	ND	1.0
Benzene	ND	1.0
Bromobenzene	ND	1.0
Bromochloromethane	ND	1.0
Bromodichloromethane	ND	1.0
Bromoform	ND	1.0
Bromomethane	ND	1.0
Carbon tetrachloride	ND	1.0
Chlorobenzene	ND	1.0
Chloroethane	ND	1.0
Chloroform	ND	1.0
Chloromethane	ND	1.0
Dibromochloromethane	ND	1.0
Dibromomethane	ND	1.0
Dichlorodifluoromethane	ND	1.0
Ethylbenzene	ND	1.0
Hexachlorobutadiene	ND	1.0
Isopropylbenzene	ND	1.0
Methyl tert-butyl ether	ND	1.0
Methylene chloride	ND	1.0
Naphthalene	ND	1.0
n-Butylbenzene	ND	1.0
n-Propylbenzene	ND	1.0

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Spectra Energy Transmission, LLC

Spectra Energy

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09081447
Lab Batch ID: R282519

Method Blank

RunID: L_090831A-5184798 Units: ug/L

Analysis Date: 08/31/2009 11:07 Analyst: E_G

Analyte	Result	Rep Limit
sec-Butylbenzene	ND	1.0
Styrene	ND	1.0
tert-Butylbenzene	ND	1.0
Tetrachloroethene	ND	1.0
Toluene	ND	1.0
Trichloroethene	ND	1.0
Trichlorofluoromethane	ND	1.0
Vinyl chloride	ND	1.0
cis-1,2-Dichloroethene	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
m,p-Xylene	ND	2.0
o-Xylene	ND	1.0
trans-1,2-Dichloroethene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
Xylenes, Total	ND	1.0
Surr: 1,2-Dichloroethane-d4	106.5	78-116
Surr: 4-Bromofluorobenzene	107.0	74-125
Surr: Toluene-d8	101.1	82-118

Laboratory Control Sample (LCS)

RunID: L_090831A-5184797 Units: ug/L
Analysis Date: 08/31/2009 9:33 Analyst: E_G

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1,1,2-Tetrachloroethane	20.0	20.3	102	71	128
1,1,1-Trichloroethane	20.0	24.5	122	61	135
1,1,2,2-Tetrachloroethane	20.0	23.3	117	60	133
1,1,2-Trichloroethane	20.0	20.0	99.9	77	127
1,1-Dichloroethane	20.0	22.8	114	68	132
1,1-Dichloroethene	20.0	24.6	123	65	134
1,1-Dichloropropene	20.0	19.1	95.6	68	126
1,2,3-Trichlorobenzene	20.0	18.0	90.2	36	154
1,2,3-Trichloropropane	20.0	23.7	118	38	153
1,2,4-Trichlorobenzene	20.0	19.3	96.4	69	144
1,2,4-Trimethylbenzene	20.0	20.0	100	64	128

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TN/C - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Spectra Energy Transmission, LLC

Spectra Energy

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09081447
Lab Batch ID: R282519

Laboratory Control Sample (LCS)

RunID: L_090831A-5184797 Units: ug/L
Analysis Date: 08/31/2009 9:33 Analyst: E_G

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,2-Dibromo-3-chloropropane	20.0	22.8	114	44	141
1,2-Dibromoethane	20.0	19.5	97.6	75	124
1,2-Dichlorobenzene	20.0	20.8	104	68	124
1,2-Dichloroethane	20.0	19.5	97.7	61	138
1,2-Dichloropropane	20.0	20.9	105	76	123
1,3,5-Trimethylbenzene	20.0	19.8	99.0	61	127
1,3-Dichlorobenzene	20.0	20.1	100	68	127
1,3-Dichloropropane	20.0	18.2	90.8	76	125
1,4-Dichlorobenzene	20.0	19.7	98.4	68	124
2,2-Dichloropropane	20.0	24.3	122	42	142
2-Chlorotoluene	20.0	19.0	95.0	64	132
4-Chlorotoluene	20.0	19.2	95.9	61	132
4-Isopropyltoluene	20.0	20.6	103	63	136
Benzene	20.0	20.3	101	74	123
Bromobenzene	20.0	19.2	95.9	68	125
Bromochloromethane	20.0	21.4	107	71	124
Bromodichloromethane	20.0	21.1	105	72	128
Bromoform	20.0	18.8	94.1	60	128
Bromomethane	20.0	19.2	95.9	53	130
Carbon tetrachloride	20.0	26.2	131	59	142
Chlorobenzene	20.0	18.5	92.3	75	125
Chloroethane	20.0	20.8	104	60	134
Chloroform	20.0	21.8	109	71	127
Chloromethane	20.0	23.0	115	50	139
Dibromochloromethane	20.0	18.6	93.1	65	130
Dibromomethane	20.0	23.0	115	79	124
Dichlorodifluoromethane	20.0	24.2	121	22	162
Ethylbenzene	20.0	18.7	93.3	72	127
Hexachlorobutadiene	20.0	21.2	106	45	152
Isopropylbenzene	20.0	18.3	91.6	58	130
Methyl tert-butyl ether	40.0	47.7	119	63	123
Methylene chloride	20.0	23.1	116	61	135
Naphthalene	20.0	19.4	97.0	33	148
n-Butylbenzene	20.0	21.7	108	62	136

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Spectra Energy Transmission, LLC

Spectra Energy

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09081447
Lab Batch ID: R282519

Laboratory Control Sample (LCS)

RunID: L_090831A-5184797 Units: ug/L
Analysis Date: 08/31/2009 9:33 Analyst: E_G

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
n-Propylbenzene	20.0	18.9	94.5	57	131
sec-Butylbenzene	20.0	20.4	102	63	131
Styrene	20.0	19.4	96.8	69	120
tert-Butylbenzene	20.0	20.5	102	59	131
Tetrachloroethene	20.0	19.1	95.5	45	173
Toluene	20.0	16.4	82.2	74	126
Trichloroethene	20.0	20.7	104	79	131
Trichlorofluoromethane	20.0	28.9	144	49	153
Vinyl chloride	20.0	21.8	109	51	148
cis-1,2-Dichloroethene	20.0	21.1	106	71	128
cis-1,3-Dichloropropene	20.0	19.6	97.8	67	128
m,p-Xylene	40.0	39.2	98.0	71	129
o-Xylene	20.0	20.7	104	74	130
trans-1,2-Dichloroethene	20.0	22.3	111	66	128
trans-1,3-Dichloropropene	20.0	19.3	96.4	60	128
Xylenes, Total	60.0	59.9	99.9	71	130
Surr: 1,2-Dichloroethane-d4	50.0	55	110	78	116
Surr: 4-Bromofluorobenzene	50.0	57.2	114	74	125
Surr: Toluene-d8	50.0	47.5	95.0	82	118

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 09081447-01
RunID: L_090831A-5184800 Units: ug/L
Analysis Date: 08/31/2009 14:16 Analyst: E_G

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
1,1,1,2-Tetrachloroethane	ND	20	16.3	81.4	20	16.1	80.6	0.920	20	68	124
1,1,1-Trichloroethane	ND	20	17.7	88.4	20	17.6	88.2	0.215	20	69	123
1,1,2,2-Tetrachloroethane	ND	20	18.4	91.9	20	18.0	89.9	2.19	20	69	130

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TN/C - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Spectra Energy Transmission, LLC

Spectra Energy

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09081447
Lab Batch ID: R282519

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 09081447-01
RunID: L_090831A-5184800 Units: ug/L
Analysis Date: 08/31/2009 14:16 Analyst: E_G

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
1,1,2-Trichloroethane	ND	20	18.2	91.1	20	18.5	92.5	1.57	20	75	126
1,1-Dichloroethane	ND	20	15.5	77.5	20	15.7	78.4	1.06	20	65	129
1,1-Dichloroethene	ND	20	15.9	79.7	20	16.0	79.9	0.238	22	61	139
1,1-Dichloropropene	ND	20	16.6	83.1	20	16.1	80.3	3.37	20	69	121
1,2,3-Trichlorobenzene	ND	20	7.49	37.5 *	20	7.63	38.1 *	1.80	20	53	127
1,2,3-Trichloropropane	ND	20	18.3	91.4	20	18.4	91.9	0.595	20	79	124
1,2,4-Trichlorobenzene	ND	20	11.8	59.0	20	12.3	61.3	3.76	20	58	118
1,2,4-Trimethylbenzene	ND	20	16.5	82.3	20	16.4	82.1	0.262	20	43	132
1,2-Dibromo-3-chloropropane	ND	20	17.6	87.9	20	17.5	87.5	0.439	20	46	131
1,2-Dibromoethane	ND	20	17.5	87.4	20	17.8	88.9	1.66	20	76	122
1,2-Dichlorobenzene	ND	20	17.2	86.2	20	17.3	86.6	0.457	20	74	110
1,2-Dichloroethane	ND	20	15.8	78.9	20	16.1	80.3	1.72	20	60	129
1,2-Dichloropropane	ND	20	17.5	87.3	20	17.6	88.2	1.11	20	76	116
1,3,5-Trimethylbenzene	ND	20	16.6	83.2	20	16.5	82.3	1.08	20	51	121
1,3-Dichlorobenzene	ND	20	16.8	83.9	20	16.7	83.3	0.729	20	71	110
1,3-Dichloropropane	ND	20	16.6	83.2	20	16.7	83.6	0.504	20	80	119
1,4-Dichlorobenzene	ND	20	16.2	81.2	20	16.4	81.8	0.724	20	69	110
2,2-Dichloropropane	ND	20	18.2	91.0	20	18.2	90.9	0.0275	20	52	122
2-Chlorotoluene	ND	20	16.9	84.5	20	16.6	83.0	1.78	20	69	112
4-Chlorotoluene	ND	20	16.9	84.7	20	16.8	84.0	0.877	20	37	110
4-Isopropyltoluene	ND	20	16.3	81.4	20	16.2	81.2	0.209	20	65	116
Benzene	ND	20	16.4	81.9	20	16.2	81.0	1.14	22	70	124
Bromobenzene	ND	20	16.8	84.0	20	17.0	84.8	0.883	20	72	111
Bromochloromethane	ND	20	16.4	82.2	20	16.7	83.7	1.88	20	73	126
Bromodichloromethane	ND	20	16.1	80.5	20	16.9	84.5	4.92	20	68	125
Bromoform	ND	20	12.8	64.1	20	13.3	66.3	3.38	20	44	132
Bromomethane	ND	20	12.0	59.8	20	11.8	58.8	1.64	20	50	140
Carbon tetrachloride	ND	20	17.2	86.2	20	17.0	85.0	1.39	20	66	126
Chlorobenzene	ND	20	15.9	79.7	20	15.8	79.1	0.768	21	68	123
Chloroethane	ND	20	12.9	64.4	20	12.7	63.7	1.19	20	59	134
Chloroform	ND	20	16.5	82.6	20	16.5	82.5	0.0121	20	68	127
Chloromethane	ND	20	14.6	73.1	20	14.6	72.9	0.356	20	51	137

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09081447 Page 19

9/1/2009 9:28:44 AM



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Spectra Energy Transmission, LLC

Spectra Energy

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09081447
Lab Batch ID: R282519

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 09081447-01
RunID: L_090831A-5184800 Units: ug/L
Analysis Date: 08/31/2009 14:16 Analyst: E_G

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Dibromochloromethane	ND	20	14.9	74.4	20	15.2	76.1	2.23	20	58	131
Dibromomethane	ND	20	18.1	90.6	20	18.7	93.4	3.05	20	82	123
Dichlorodifluoromethane	ND	20	11.8	58.9	20	12.3	61.4	4.17	20	35	143
Ethylbenzene	ND	20	16.2	80.8	20	15.6	78.0	3.47	20	76	122
Hexachlorobutadiene	ND	20	10.9	54.6	20	10.7	53.7	1.81	20	43	137
Isopropylbenzene	ND	20	14.1	70.3	20	13.7	68.3	2.91	20	57	124
Methyl tert-butyl ether	ND	40	34.9	87.3	40	36.2	90.6	3.79	20	10	200
Methylene chloride	ND	20	14.8	74.1	20	15.3	76.4	3.16	20	70	134
Naphthalene	ND	20	10.3	51.7	20	10.5	52.3	1.12	20	42	140
n-Butylbenzene	ND	20	16.7	83.4	20	16.6	83.0	0.367	20	82	112
n-Propylbenzene	ND	20	16.2	81.2	20	16.1	80.7	0.686	20	73	108
sec-Butylbenzene	ND	20	16.4	82.0	20	16.5	82.4	0.523	20	76	110
Styrene	ND	20	15.9	79.6	20	15.9	79.3	0.409	20	58	152
tert-Butylbenzene	ND	20	16.6	82.9	20	16.5	82.5	0.538	20	66	120
Tetrachloroethene	ND	20	17.9	89.6	20	17.1	85.4	4.74	20	71	130
Toluene	ND	20	15.3	76.7 *	20	14.7	73.7 *	4.04	24	80	117
Trichloroethene	ND	20	18.0	90.2	20	17.8	88.8	1.58	21	82	121
Trichlorofluoromethane	ND	20	18.4	92.2	20	18.1	90.3	2.10	20	74	138
Vinyl chloride	ND	20	14.6	73.0	20	12.8	64.2	12.9	20	45	143
cis-1,2-Dichloroethene	ND	20	15.9	79.4	20	15.9	79.4	0.00630	20	67	132
cis-1,3-Dichloropropene	ND	20	16.7	83.5	20	17.4	86.8	3.83	20	67	116
m,p-Xylene	ND	40	32.7	81.7	40	32.1	80.3	1.73	20	69	127
o-Xylene	ND	20	16.8	84.2	20	16.5	82.4 *	2.25	20	84	114
trans-1,2-Dichloroethene	ND	20	14.9	74.3	20	14.9	74.7	0.503	20	68	131
trans-1,3-Dichloropropene	ND	20	15.2	76.1	20	16.4	81.8	7.16	20	56	131
Xylenes, Total	ND	60	49.5	82.6	60	48.6	81.0	1.91	20	69	127
Surr: 1,2-Dichloroethane-d4	ND	50	52.4	105	50	53.8	108	2.68	30	78	116
Surr: 4-Bromofluorobenzene	ND	50	53.5	107	50	53.2	106	0.525	30	74	125
Surr: Toluene-d8	ND	50	50.7	101	50	50.0	100	1.24	30	82	118

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TN/C - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Spectra Energy Transmission, LLC

Spectra Energy

Analysis: Chemical Oxygen Demand
Method: SM5220 C

WorkOrder: 09081447
Lab Batch ID: R282512A

Method Blank

RunID: WET_090831K-5184710 Units: mg/L
Analysis Date: 08/31/2009 12:00 Analyst: BDG

Samples in Analytical Batch:

Lab Sample ID Client Sample ID
09081447-01E MISC Drinking Water - 2321

Analyte	Result	Rep Limit
Chemical Oxygen Demand	ND	3.0

Laboratory Control Sample (LCS)

RunID: WET_090831K-5184712 Units: mg/L
Analysis Date: 08/31/2009 12:00 Analyst: BDG

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chemical Oxygen Demand	104.0	102.6	98.68	85	115

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 09081447-01
RunID: WET_090831K-5185028 Units: mg/L
Analysis Date: 08/31/2009 14:00 Analyst: BDG

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Chemical Oxygen Demand	ND	50	52.63	105.3	50	52.63	105.3	0	10	80	120

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09081447 Page 21

9/1/2009 9:28:45 AM

*Sample Receipt Checklist
And
Chain of Custody*



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Sample Receipt Checklist

Workorder:	09081447	Received By:	CAW
Date and Time Received:	8/31/2009 9:00:00 AM	Carrier name:	Fedex-Priority
Temperature:	15.2, 15.9°C	Chilled by:	Water Ice

- | | | | |
|--|---|--|---|
| 1. Shipping container/cooler in good condition? | Yes ☒ | No ☐ | Not Present ☐ |
| 2. Custody seals intact on shipping container/cooler? | Yes ☐ | No ☐ | Not Present ☒ |
| 3. Custody seals intact on sample bottles? | Yes ☐ | No ☐ | Not Present ☒ |
| 4. Chain of custody present? | Yes ☒ | No ☐ | |
| 5. Chain of custody signed when relinquished and received? | Yes ☒ | No ☐ | |
| 6. Chain of custody agrees with sample labels? | Yes ☒ | No ☐ | |
| 7. Samples in proper container/bottle? | Yes ☐ | No ☒ | |
| 2. Well sample for COD and metals was received unpreserved. | | | |
| 8. Sample containers intact? | Yes ☒ | No ☐ | |
| 9. Sufficient sample volume for indicated test? | Yes ☒ | No ☐ | |
| 10. All samples received within holding time? | Yes ☒ | No ☐ | |
| 11. Container/Temp Blank temperature in compliance? | Yes ☐ | No ☒ | |
| 1. 795503878505-15.9C, 870101736740- 15.2C | | | |
| 12. Water - VOA vials have zero headspace? | Yes ☒ | No ☐ | VOA Vials Not Present ☐ |
| 13. Water - Preservation checked upon receipt (except VOA*)? | Yes ☒ | No ☐ | Not Applicable ☐ |

*VOA Preservation Checked After Sample Analysis

SPL Representative:

Contact Date & Time:

Client Name Contacted:

Non Conformance Issues: 1. Proceed as per client. 2. Preserved COD with 2 mls Sulfuric Lot # 052509-2U. Preserved metals with 3 mls. Nitric Acid Lot#072709-2EE

Client Instructions:



chain of custody and sample log

contact name:

contact no:

SPL Houston
8880 Interchange Drive
Houston, TX
77054

coc/arj no.: 9834

Page 1 of 1

distribution

Original to LABORATORY

Copy to Spectra Lab Services

fax: (713) 386-4733

09081447

LABORATORY USE ONLY

Comp. Station or

Upstream Station:

shipping address:

Steckman Ridge
ATTN: Sean Cramer
1809 Rock Hill Church RD
Clearville, PA 15535

717-540-8303

program code:

work order:

turnaround:

region:

routing code:

accounting code:

MISC

24 Hours

Northeast

GTAGTEAST

10076 0401101 63016 A439

method of shipment (to field):

FEDEX (Next day)

method of shipment (from field):

freight bill#:

cooler temp - (C):

condition of contents:

sampler print:

sampler signature:

Lab Acceptance Signature:

date/time:

relinquished by:

date/time:

recd. by:

date/time:

relinquished by:

date/time:

recd. by:

date/time:

comments or lab remarks:

environmental & corrosion analysis:

date bottleware required: 8/29/2009 12:00:00AM

expected sample date: 8/29/2009 12:00:00AM

prelim data:

False

Type II Std.

JJBauer@spectraenergy.com

type of data package:

e-mail:

Sys_sample_code	Sample Point	Sample Comment	Collection Date	Collection Time	Matrix	COMP/GRAB	MAG	Bottle Preservative	ICE	Use Accepted Pkg.	QC Required
9834-01	MISC	Drinking Water - 2321			A	G	MAG - 8260B_VOA_AQ_3	HCl	yes	False	
9834-01	MISC	Drinking Water - 2321			A	G	MAG - 200.8_NPDESNET_AQ	HNO3	no	False	
9834-01	MISC	Drinking Water - 2321			A	G	MAG - 608_PCB_AQ_2	None	yes	False	
9834-01	MISC	Drinking Water - 2321			A	G	MAG - 8270_PAH_AQ	none	yes	False	
9834-01	MISC	Drinking Water - 2321			A	G	MAG - 5220_COD_AQ	H2SO4	yes	False	
9834-01	MISC	Drinking Water - 2321			A	G	MAG - 1664_HEM_O&G_AQ	HCL	yes	False	

* Each sample on the chain of custody should have a unique sample date and time.

* Sampler please fill in all shaded areas.



chain of custody and sample log

contact name:

contact no:

SPL Houston
8880 Interchange Drive

Houston, TX
77054

9834

coc/arf no.:

Page 1 of 1

distribution

Original to LABORATORY

Copy to Spectra Lab Services

fax: (713) 386-4733

09081447
09081449

LABORATORY USE ONLY

Comp. Station or

Upstream Station:

shipping address:

Stockman Ridge
ATTN: Sean Cramer
1809 Rock Hill Church RD
Clearville, PA 15535

FEDEX (Next day)

method of shipment (to field):

method of shipment (from field):

freight bill#:

cooler temp - (c):

condition of contents:

sampler print:

sampler signature:

Lab Acceptance Signature:

program code:
work order:
turnaround:
region:
routing code:
accounting code:

717-540-8303

MISC

24 Hours

Northeast

GTAGTEAST

10076 040101 63016 A439

See attached
manual COC for
within scope analysis

15.2°C

15.9°C

MARY VELASQUEZ

Carlyle Velazquez

Caw White

date/time:

8/31/09 900

relinquished by:

date/time:

8/24/09

recd by:

Caw White

date/time:

8/31/09 900

relinquished by:

date/time:

recd by:

Caw White

date/time:

8/31/09 900

comments or lab remarks:

environmental & corrosion analysis:

date bottleware required: 8/29/2009 12:00:00AM

expected sample date: 8/29/2009 12:00:00AM

prelim data: False

Type II Std.

JTBauer@spectraenergy.com

type of data package:

e-mail:

Sys_sample_code	Sample Point	Sample Comment	Collection Date	Collection Time	Matrix	COMPI GRAB	MAG	Bottle Preservative	ICE	Use Accepted Pkg	QC Required
9834-01	MISC	Drinking Water - 2321			A	G	MAG - 5220 VOA_AQ_3	HCL	yes	False	
9834-01	MISC	Drinking Water - 2321			A	G	MAG - 5220 NPDSEMET_AQ * L2	HNO3	no	False	
9834-01	MISC	Drinking Water - 2321			A	G	MAG - 608 PCB_AQ_2	None	yes	False	
9834-01	MISC	Drinking Water - 2321			A	G	MAG - 8230 PAH_AQ	none	yes	False	
9834-01	MISC	Drinking Water - 2321			A	G	MAG - 5220 COD_AQ * L2	H2SO4	yes	False	
9834-01	MISC	Drinking Water - 2321			A	G	MAG - 1664 HEM-ORG_AQ	HCL	yes	False	

* Note asked analysis is we not originally within scope and neither bottleware or preservative were provided by Lancaster Labs for these analysis. Run sample KUHNIG-WELL-082309 for these analysis if enough sample and time to preserve is available. -Mona P. 11/11

* Each sample on the chain of custody should have a unique sample date and time.

Shaded areas indicate areas to be filled in.